

col



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,471	11/26/2003	Johnny Zhong	15436.131.1	9866

7590 07/22/2005

WORKMAN NYDEGGER  
1000 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, UT 84111

EXAMINER

STEIN, JAMES D

ART UNIT PAPER NUMBER

2874

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/724,471	ZHONG ET AL.	
	Examiner	Art Unit	
	James D. Stein	2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ~~5, 7, 13, 16, 17, 22 and 23~~ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-21 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 2, 3 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0804</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

This Office Action is in response to applicant's election without traverse of the claims of species II filed on 6/6/2005, as necessitated by the Restriction Requirement mailed on 5/5/2005. Applicant has elected species II ("optical add/drop patch cord with casing and various fibers coupled thereto") for prosecution and concluded that claims 1, 2, 4-6, 8-12, 14, 15, and 18-21 read on this species. Claims 22-23 are withdrawn at this time.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by [USPAT 6,834,137] to Pan et al, which discloses a related optical add/drop device.

With regard to claim 1, fig. 5A of Pan shows an optical add/drop patch cord comprising an optical add/drop patch cord comprising: an optical add/drop component 39 disposed in a casing (housing 30); an input fiber 33 permanently coupled to the casing 30 and optically coupled (col. 7 lines 11-12) to the optical add/drop component 39; a drop fiber 32 permanently coupled to the casing 30 and optically coupled (col. 7 lines 11-13) to the optical add/drop component 39; an add fiber 31 permanently coupled to the casing 30 and optically coupled (col. 7 lines 18-19) to the optical add/drop component 39; and

Art Unit: 2874

an output fiber 34 permanently coupled to the casing 30 and optically coupled (col. 7 lines 18-20) to the optical add/drop component 39.

With regard to claim 5, in addition to the rejection of claim 1 previously discussed above, figs. 6A, 6B all show embodiments wherein a plurality of input ports 57 and output ports 58 are configured to add/drop a plurality of signals.

With regard to claim 6, in addition to the rejection of claim 1 previously discussed above, Pan teaches the optical add/drop patch cord device to further include collimating elements, first and second GRIN lenses 36 and 37. GRIN lenses are collimating optical well known in the optical coupler art.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. as applied to claim 1 above, and further in view of [USPAT 6,296,400] to Uchiyama et al.. Pan et al. discloses the claimed invention except for the input, drop, add and output fibers are coupled to the casing using solder ferrules. However, Pan generally discloses (col. 6 lines 54-56) securing the optical fibers within the housing. Apart from soldering the ferrules of optical fibers to a casing or housing an extremely well known means of securing an optical fiber to a housing, Uchiyama discloses soldering the ferrule of an optical fiber to be advantageous because it hermetically secures the fiber to the housing (col. 2 lines 1-2). Therefore, it would have been obvious at the time of the invention to

Art Unit: 2874

one of ordinary skill in the art to ensure the input, drop, add, and output fibers are all coupled to the casing using solder ferrules in robust and reliable manner.

***Allowable Subject Matter***

Claims 8-21 are allowed.

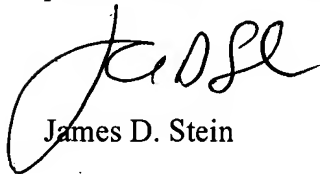
Claim 2, 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited prior art discloses or suggests the optical add/drop patch cord previously discussed above, the add/drop optical component comprising: an optical substrate; a first thin film formed on a first end of the optical substrate; a second thin film formed on a second end that opposes the first end; and wherein the first thin film is configured to allow at least one wavelength of an optical signal from the input fiber to pass through the first thin film towards the drop fiber while reflecting other wavelength(s) of the optical signal to the second thin film; and the second thin film is configured to reflect the other wavelength(s) of the optical signal towards the output fiber while allowing at least one wavelength to pass through the thin film from the add fiber towards the output fiber. The Pan et al reference teaches the optical add/drop component to be a liquid crystal cell, and does not function in the manner claimed by applicant. [USPUB 2002/0197008] to Kim et al. discloses a related device comprising substrate with reflective films on opposing ends. However, a second film is not configured such that it reflects all wavelengths of light to the output fiber and also permits at least a wavelength of light to pass through the thin film from the add fiber to the output fiber. Furthermore, it does not teach the various casing and fiber limitations recited in claim 1.

Art Unit: 2874


*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: [USPUB 2004/0101247] to Chen et al, which discloses a related optical multiplexer device.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).



James D. Stein



Sung Pak  
Patent Examiner  
AU 2874